

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	4	(acoustic\$4 or sonic\$4 or ultrasonic\$4 or sound\$3 or ultrasound\$3 or supersonic\$4 or supersound\$3) same property same fluid same "in situ" same transducer near5 (pressure and temperature)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 19:21
S2	13	("3370463").URPN.	USPAT	OR	ON	2005/10/27 19:18
S3	0	(acoustic\$4 or sonic\$4 or ultrasonic\$4 or sound\$3 or ultrasound\$3 or supersonic\$4 or supersound\$3) same property same fluid near3 sample same transducer near5 (pressure and temperature) same chamber	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 19:22
S4	111	(acoustic\$4 or sonic\$4 or ultrasonic\$4 or sound\$3 or ultrasound\$3 or supersonic\$4 or supersound\$3) same property same fluid near3 sample	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 19:33
S5	2	"5708191".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 19:29
S6	2	"5886250".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 19:31
S7	2	"6683681".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 19:31
S8	28	(acoustic\$4 or sonic\$4 or ultrasonic\$4 or sound\$3 or ultrasound\$3 or supersonic\$4 or supersound\$3) same (velocity or voulume or density or compressibility with viscosity) same fluid near3 sample same (calibrat\$4 or adjust\$4 or alter\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 20:29
S9	2	"6912891".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 20:42

## EAST Search History

S10	2	"00666646"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 20:42
S11	0	"2003 00666646"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 20:42
S12	0	"2003/00666646"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 20:42
S13	2	"4142414".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 21:04
S14	2	"5515733".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 20:45
S15	29	"0176789"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 20:45
S16	5105987	"20030176789" A1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 20:46
S17	5105987	"2003/0176789" A1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 20:46
S18	10	"2003/0176789" A1 same Kaplan	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 20:46
S19	2	"6640625".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 21:18

## EAST Search History

S20	1	10/821767	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 22:19
S21	114	piston near5 (chamber or vessel or container or housing or pipe) near5 transducer same fluid	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 22:50
S22	9551	(chamber or vessel or container or housing or pipe) near5 (seal\$4 or lock\$4) same piston same (inlet or conduit) same fluid	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 22:52
S23	133	(chamber or vessel or container or housing or pipe) near5 (seal\$4 or lock\$4) same piston same (inlet or conduit) same fluid same (reflect\$4 or refract\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 23:14
S24	2	chamber near5 "static piston" same fluid	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 23:16
S25	1	chamber near5 "static piston" same support\$4 same transducer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 23:16
S26	1	chamber near5 "static piston" same transducer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 23:18
S27	1	(chamber or vessel or container or pipe) near5 "static piston" same transducer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 23:25
S28	154	(chamber or vessel or container or pipe) near5 piston same slidab\$4 same transducer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 23:27
S29	2	"6467544".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 23:54

## EAST Search History

S30	2	"5741971".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 23:58
S31	2	"4142414".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/27 23:58
S32	0	(transducer and receiver) adj3 piezoelectric same "flow meter"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/28 00:00
S33	10	(transducer and receiver) adj3 piezoelectric same fluid	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/28.00:32
S34	549	"electromagnetic coil" same (reflector or delay or refractive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/28 00:33
S35	0	"electromagnetic coil" same (reflector or delay or refractive) same flowmeter	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/28 00:33
S36	1	"electromagnetic coil" same (reflector or delay or refractive) same property same fluid	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/28 00:33
S37	13	"electromagnetic coil" same (reflector or delay or refractive) same property	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/28 00:34
S38	20	"electromagnetic coil" same (reflector or delay or refractive) same (density or viscosity or velocity)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/28 00:36
S39	1	"electromagnetic coil" near5 (reflector or delay or refractive) same (density or viscosity or velocity)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/28 00:36

## EAST Search History

S40	0	"electromagnetic coil" near5 (reflector or "delay line" or refractive) same (density or viscosity or velocity)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/28 00:37
S41	24	"electromagnetic coil" near5 (reflector or "delay line" or refractive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/28 01:03
S42	53	reflector same (disc and ring) same transducer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/10/28 01:04
S43	0	piston near3 static same support\$4 same transducer same (chamber or vessel or container or pipe or tube) same fluid	USPAT	OR	OFF	2006/04/11 22:45
S44	1	piston near3 static same transducer same (chamber or vessel or container or pipe or tube) same fluid	USPAT	OR	OFF	2006/04/11 22:46
S45	3	piston same static near3 pressure same transducer same (chamber or vessel or container or pipe or tube) same fluid	USPAT	OR	OFF	2006/04/11 22:46
S46	4	("5477101").URPN.	USPAT	OR	OFF	2006/04/11 22:55
S47	2	"4991439".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/12 19:51
S48	1	10/888107	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/12 20:08
S49	2	"4458536".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/12 22:32
S50	1	10/821767	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/12 22:32

## EAST Search History

S51	0	"static piston" near5 support\$4 near3 transducer same fluid	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 20:49
S52	0	piston adj3 static near5 support\$4 near3 transducer same fluid	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 20:49
S53	0	piston adj3 static near5 support\$4 near3 transducer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 20:50
S54	46	piston near5 support\$4 near3 transducer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 21:04
S55	1	10/821767	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 20:58
S56	29	piston same support\$4 same transducer same fluid same (borehole or downhole)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 21:14
S57	230	downhole adj1 sampl\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 21:15
S58	1	S57 and (transmitter or transducer) and receiver and reflector	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 21:16
S59	1	S57 and (transmitter or transducer or receiver) and reflector	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 22:21
S60	10031	(acoustic\$4 or sonic\$4 or sound\$3 or ultrasonic\$4 or ultrasound\$3 or supersonic\$4 or supersound\$3) same (transmitter or transducer or receiver) and reflector	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 21:18

## EAST Search History

S61	1	S57 and S60	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 21:18
S62	0	(acoustic\$4 or sonic\$4 or sound\$3 or ultrasonic\$4 or ultrasound\$3 or supersonic\$4 or supersound\$3) same (transmitter or transducer or receiver) and reflector same "downhole sampling"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 21:18
S63	3	(acoustic\$4 or sonic\$4 or sound\$3 or ultrasonic\$4 or ultrasound\$3 or supersonic\$4 or supersound\$3) same (transmitter or transducer or receiver) same "downhole sampling"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 21:18
S64	17	("2380082"   "4092858"   "4369100"   "4659218"   "4782695"   "4860581"   "5024110"   "5097698"   "5329811"   "5473939"   "5587525"   "5622223"   "5635631"   "5636631"   "5741962"   "6176323").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/15 21:25
S65	1	S57 and (transmitter or transducer) and reflector	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 22:22
S66	34	S57 and (transmitter or transducer) and receiver	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/15 22:22
S67	2	"5886250".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/17 11:42
S68	2	"5708191".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/17 11:47
S69	2	"6683681".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/04/17 13:02